

Notice of Allowability

Application No.

10/002,148

Examiner

Kimbinh T. Nguyen

Applicant(s)

SAKAKIBARA, KUNITERU

Art Unit

2671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 03/28/05.
2. ☒ The allowed claim(s) is/are 1,3,4,6,7,9-13,15,16,18 and 20-22.
3. ☒ The drawings filed on 05 December 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

1. This action is responsive to amendment filed 03/28/05.
2. Claims 1, 3, 4, 6, 7, 9-13, 15, 16, 18 and 20-22 are pending in the application.

Reasons For Allowance

3. The following is an examiner's statement of reasons for allowance:

Claims 1 and 13, the prior art does not teach an extracting portion for separating high precision areas from low precision areas in the first original data set; and a corresponding point searching unit for searching at least one set of corresponding points in the low precision areas and for searching at least one set of corresponding points in the high precision areas. the corresponding point searching unit uses results of the search of corresponding points in the low precision areas as a default for beginning the search of corresponding points in the high precision areas, and a three-dimensional generating portion for generating a three-dimensional data set of the object using the corresponding points found by the corresponding point searching unit and the first original data set and the second original data set and the first low resolution data set and the second low resolution data set.

Claims 6 and 18, the prior art does not teach a corresponding point searching unit for point searching unit uses results of the search of corresponding points in the second resolution images searching at least one set of corresponding points in the second resolution images and for searching at least one set of corresponding points in the high precision areas. the corresponding point in the characteristic areas, the corresponding as a default for beginning the search of corresponding points in the characteristic areas.

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and constructing three-dimensional data of the object by using the corresponding points found by the corresponding point searching unit and data from the input images for the characteristic areas of the object and by using data from the converted images for remaining areas.

Claim 8, the prior art does not teach a corresponding point searching unit for searching at least one set of corresponding points in the second resolution images and for searching at least one set of corresponding points in the high precision areas. the corresponding point in the characteristic areas, the corresponding point searching unit uses results of the search of corresponding points in the second resolution images as a default for beginning the search of corresponding points in the characteristic areas, and reconstructing three-dimensional data of the object by using from among the multiple images having different resolutions, high resolution images for the selected areas, and low resolution images for the non-selected areas, and by seeking correspondence between the images obtained from different viewpoints.

Claim 12, the prior art does not teach a correspondence seeking unit for seeking correspondence between the images obtained from different viewpoints using the high resolution image regarding the areas projected on the high resolution image and reconstructing high resolution 3D data of the object; replacing the low resolution 3D data regarding the specific areas with high resolution 3D data; wherein the specific areas are designated in the standard model in advance.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

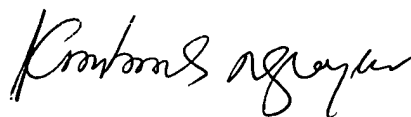
accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimbinh T. Nguyen whose telephone number is (571) 272-7644. The examiner can normally be reached on Monday to Thursday from 7:00 AM to 4:30 PM. The examiner can also be reached on alternate Friday from 7:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Zimmerman, can be reached at (571) 272-7653. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

May 13, 2005



KIMBINH T. NGUYEN
PRIMARY EXAMINER